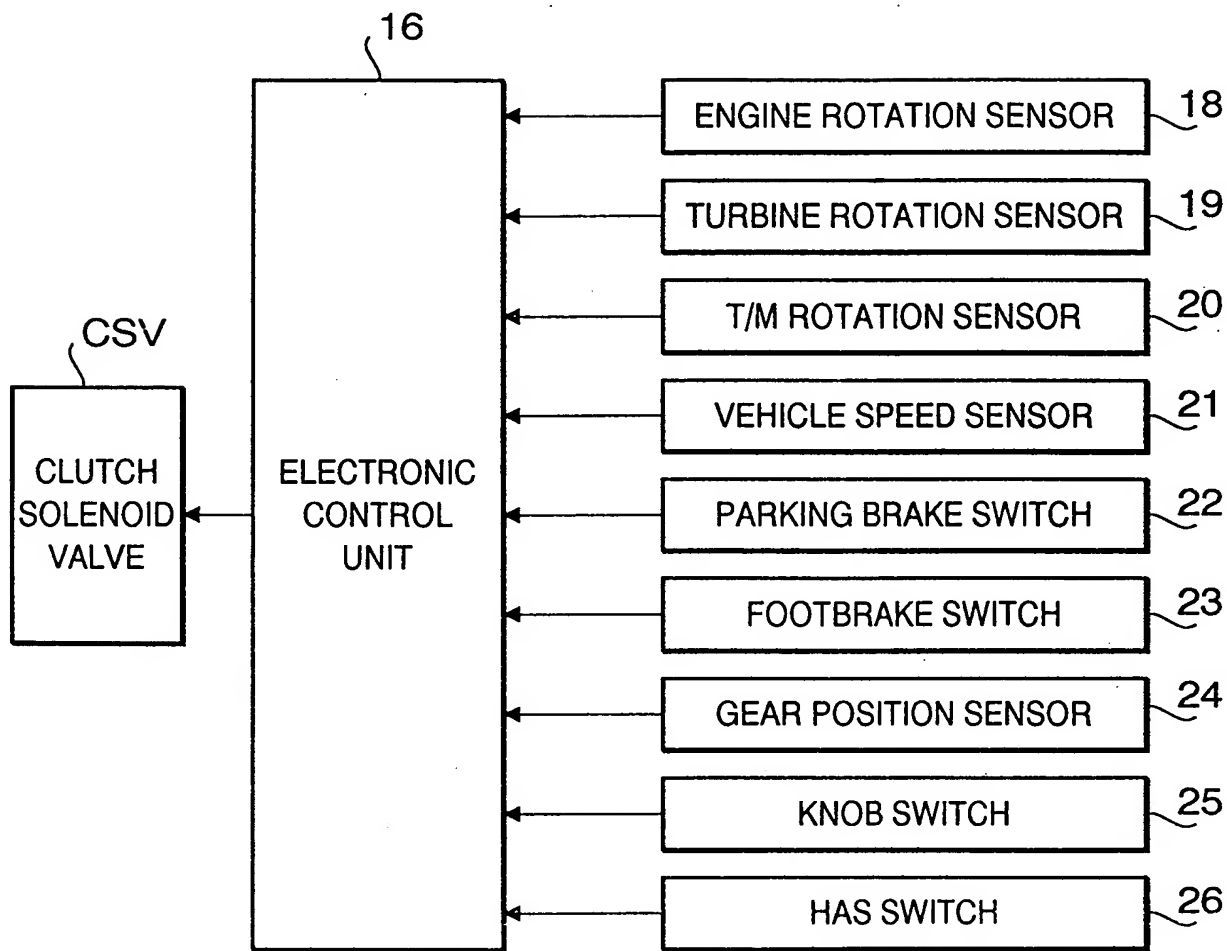


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FIG.4



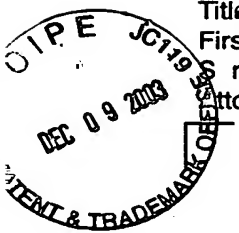


FIG. 2

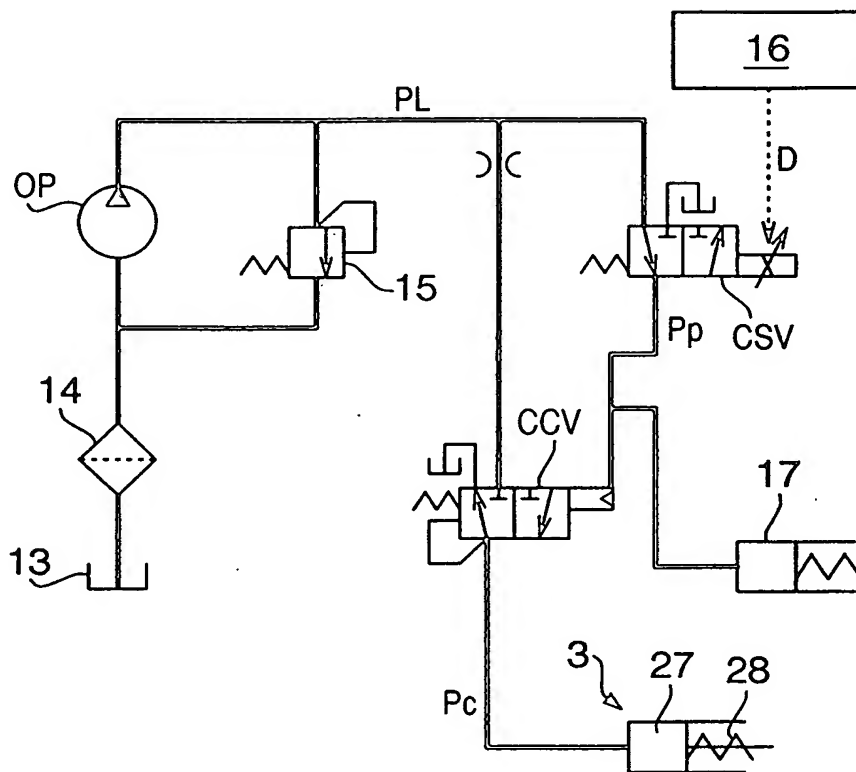
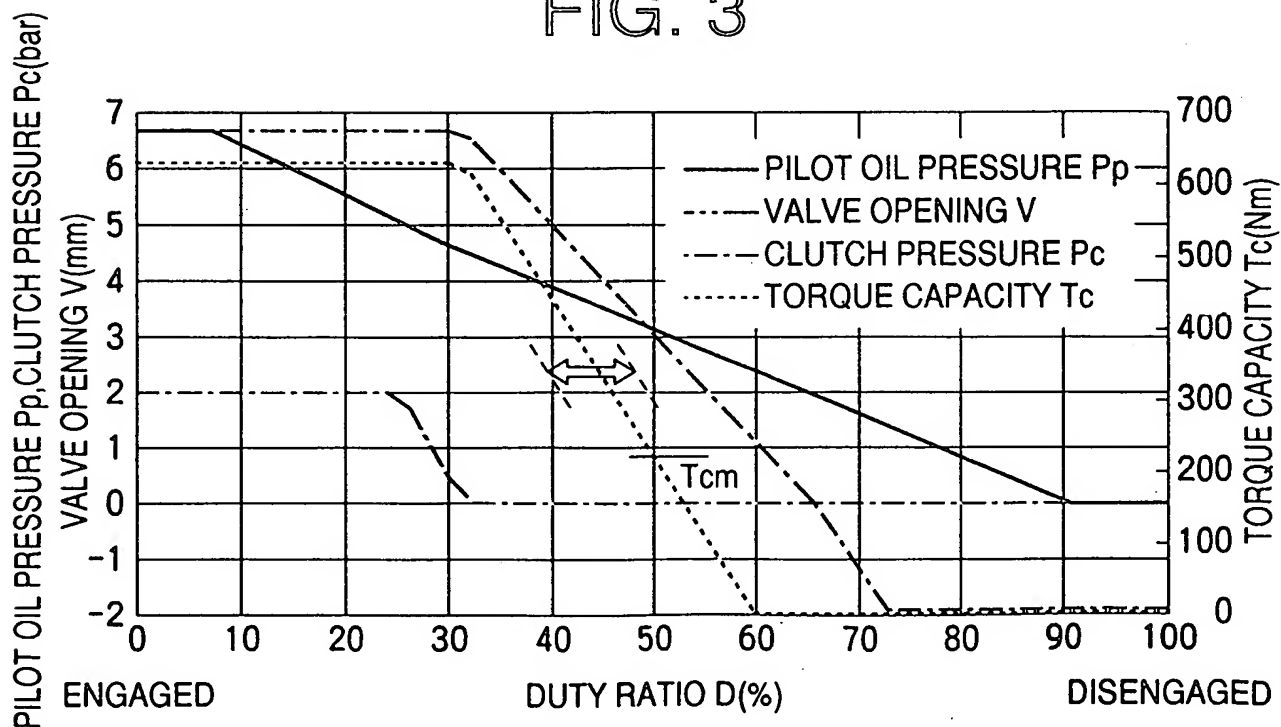
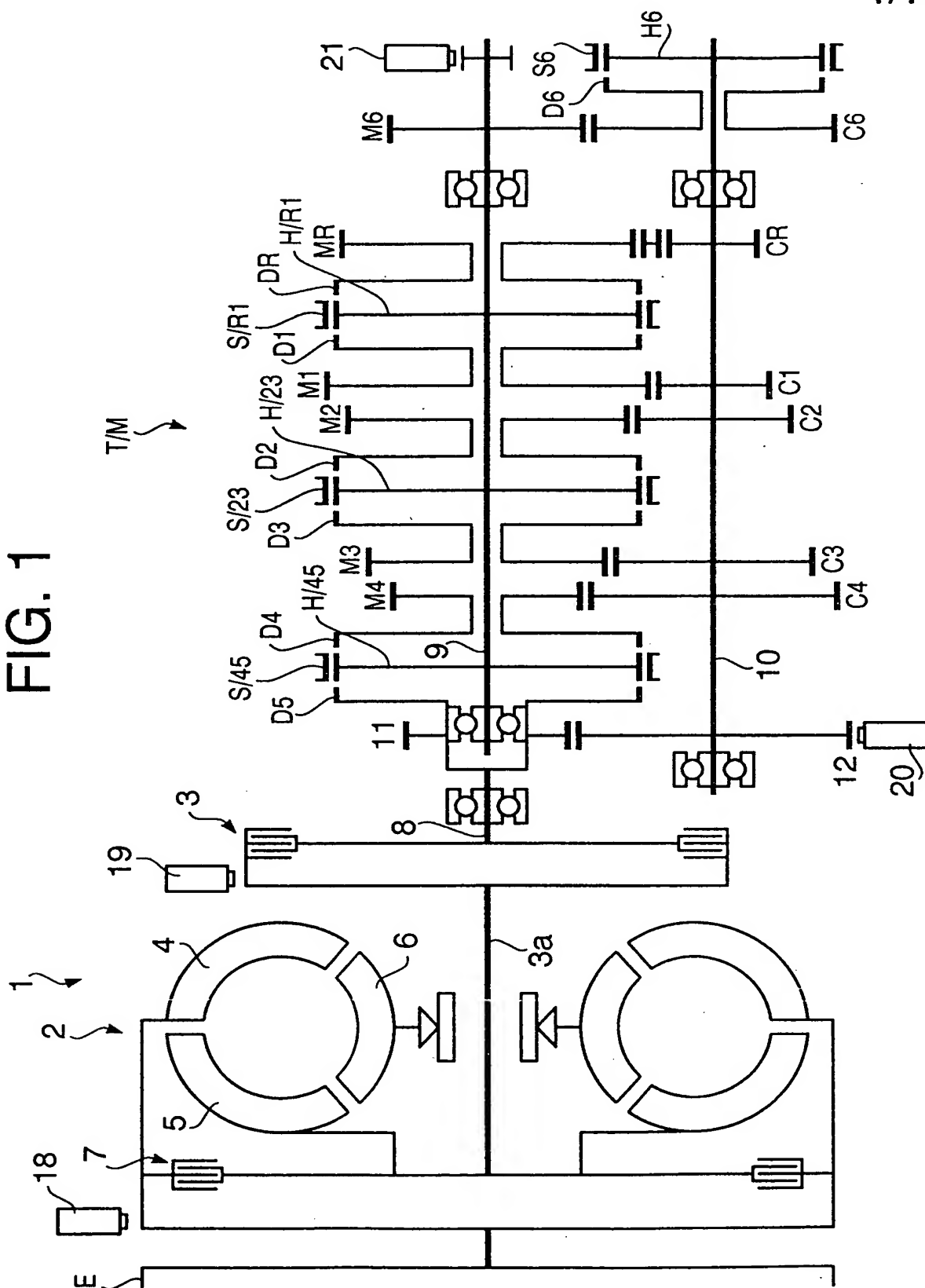


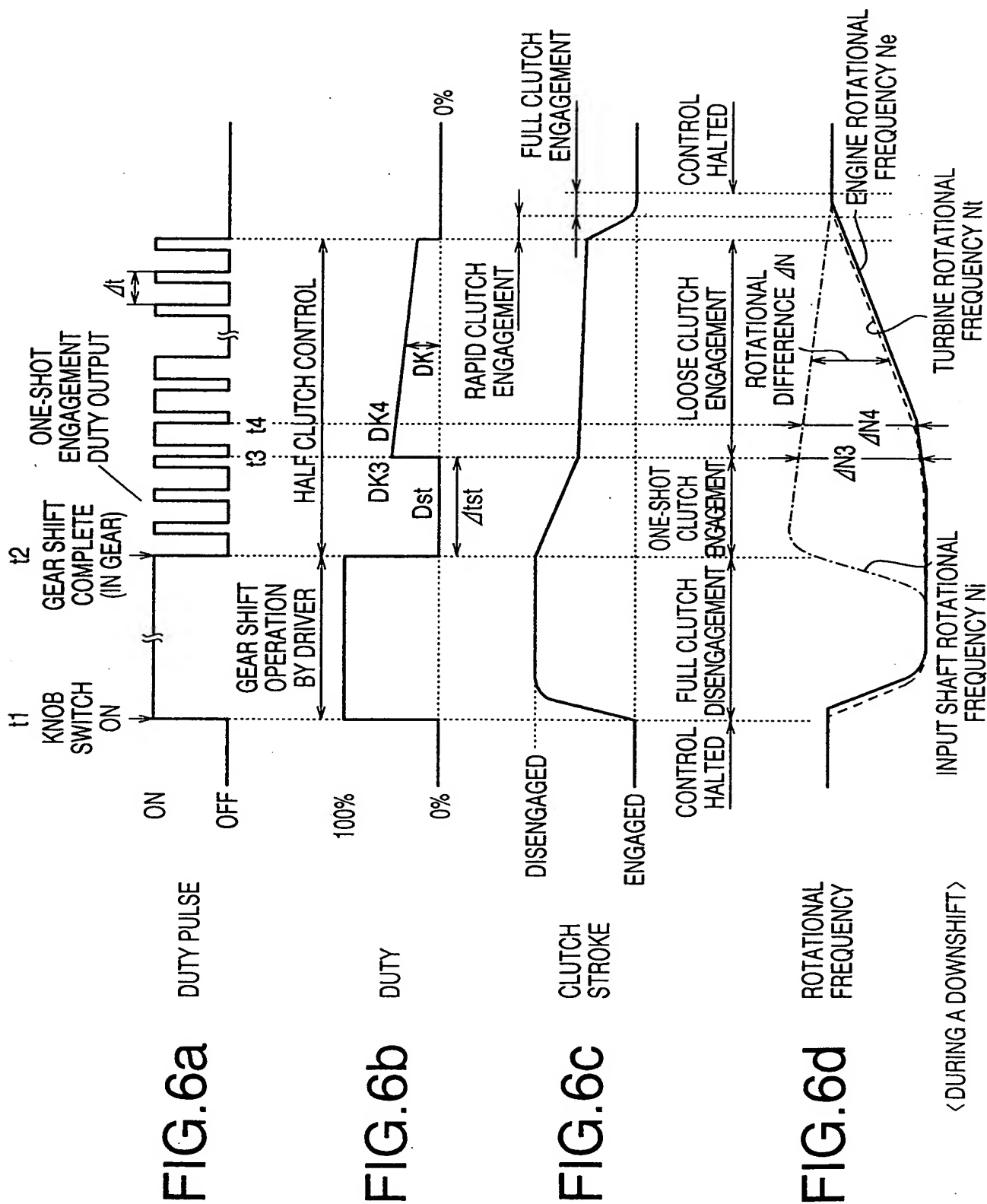
FIG. 3



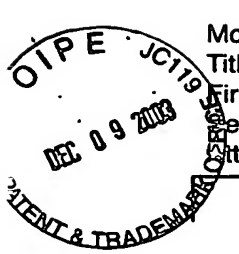


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< DURING A DOWNSHIFT >



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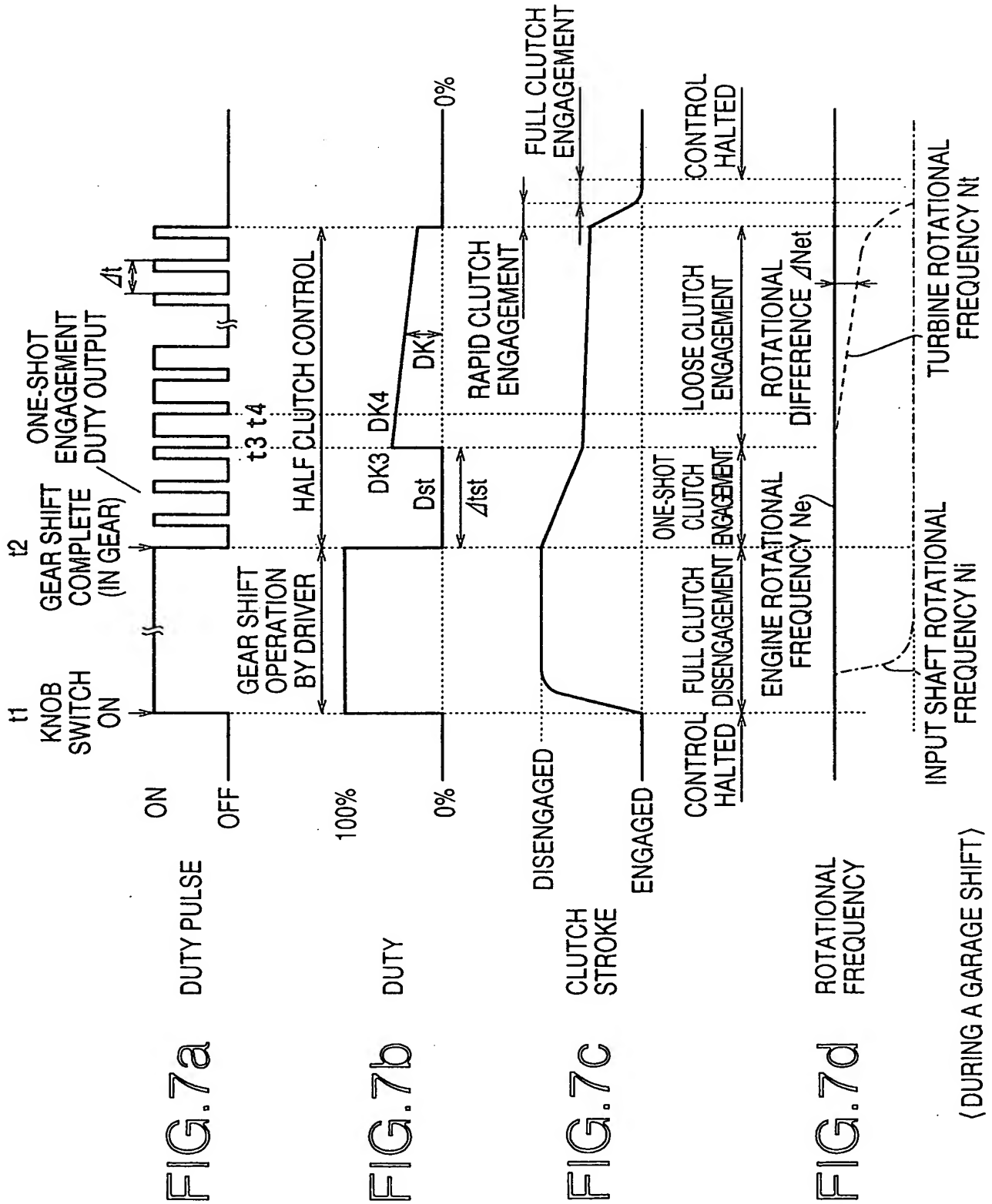




FIG. 8

ΔN

GEAR STAGE

| Ds | 160rpm | 320rpm | 480rpm | 640rpm | 800rpm | 960rpm | 1120rpm | 1280rpm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|
| R GEAR | 0005(H) | 0030(H) | 0040(H) | 0050(H) | 0060(H) | 0070(H) | 0080(H) | 0090(H) |
| 1st SPEED | 0005(H) | 0030(H) | 0030(H) | 0030(H) | 0040(H) | 0040(H) | 0040(H) | 0050(H) |
| 2nd SPEED | 0005(H) | 0030(H) | 0030(H) | 0030(H) | 0040(H) | 0040(H) | 0040(H) | 0050(H) |
| 3rd SPEED | 0005(H) | 0050(H) | 0060(H) | 0070(H) | 0080(H) | 0090(H) | 00A0(H) | 00B0(H) |
| 4th SPEED | 0100(H) | 0100(H) | 0100(H) | 0100(H) | 0100(H) | 0200(H) | 0300(H) | 0400(H) |
| 5th SPEED | 0100(H) | 0100(H) | 0100(H) | 0100(H) | 0100(H) | 0200(H) | 0300(H) | 0400(H) |
| 6th SPEED | 0100(H) | 0100(H) | 0100(H) | 0100(H) | 0100(H) | 0200(H) | 0300(H) | 0400(H) |

<DURING AN UPSHIFT>

FIG. 9

ΔN

GEAR STAGE

| Ds | 160rpm | 320rpm | 480rpm | 640rpm | 800rpm | 960rpm | 1120rpm | 1280rpm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|
| R GEAR | 0005(H) | 0008(H) | 0008(H) | 0008(H) | 0010(H) | 0020(H) | 0030(H) | 0030(H) |
| 1st SPEED | 0005(H) | 0005(H) | 0008(H) | 0008(H) | 0010(H) | 0020(H) | 0030(H) | 0030(H) |
| 2nd SPEED | 0005(H) | 0005(H) | 0008(H) | 0008(H) | 0010(H) | 0020(H) | 0030(H) | 0030(H) |
| 3rd SPEED | 0005(H) | 0005(H) | 0010(H) | 0010(H) | 0020(H) | 0030(H) | 0040(H) | 0050(H) |
| 4th SPEED | 0005(H) | 0800(H) | 0100(H) | 0200(H) | 0100(H) | 0100(H) | 0080(H) | 0080(H) |
| 5th SPEED | 0100(H) | 0200(H) | 0200(H) | 0200(H) | 0100(H) | 0100(H) | 0080(H) | 0080(H) |
| 6th SPEED | 0100(H) | 0200(H) | 0200(H) | 0200(H) | 0100(H) | 0100(H) | 0080(H) | 0080(H) |

<DURING A DOWNSHIFT>



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FIG.10

ΔN

GEAR STAGE

| Ds | 0rpm | 40rpm | 80rpm | 120rpm | 160rpm | 200rpm | 240rpm | 280rpm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|
| R GEAR | 0040(H) | 0030(H) | 0020(H) | 0010(H) | 0010(H) | 0010(H) | 00A0(H) | 0000(H) |
| 1st SPEED | 0040(H) | 0030(H) | 0020(H) | 0010(H) | 0010(H) | 0010(H) | 00A0(H) | 0000(H) |
| 2nd SPEED | 0040(H) | 0030(H) | 0020(H) | 0010(H) | 0010(H) | 0010(H) | 00A0(H) | 0000(H) |
| 3rd SPEED | 0040(H) | 0030(H) | 0020(H) | 0010(H) | 0010(H) | 0010(H) | 00A0(H) | 0000(H) |
| 4th SPEED | 0040(H) | 0030(H) | 0020(H) | 0010(H) | 0010(H) | 0010(H) | 00A0(H) | 0000(H) |
| 5th SPEED | 0040(H) | 0030(H) | 0020(H) | 0010(H) | 0010(H) | 0010(H) | 00A0(H) | 0000(H) |
| 6th SPEED | 0040(H) | 0030(H) | 0020(H) | 0010(H) | 0010(H) | 0010(H) | 00A0(H) | 0000(H) |

<DURING A GEAR SHIFT>

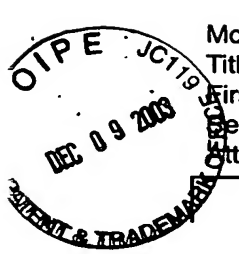


FIG.11

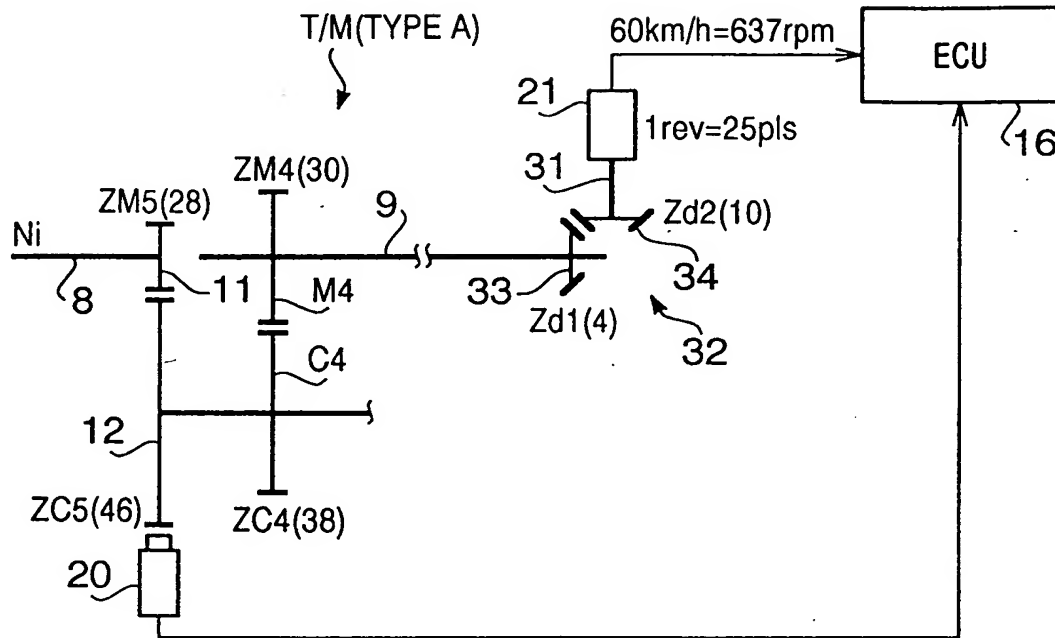


FIG.12

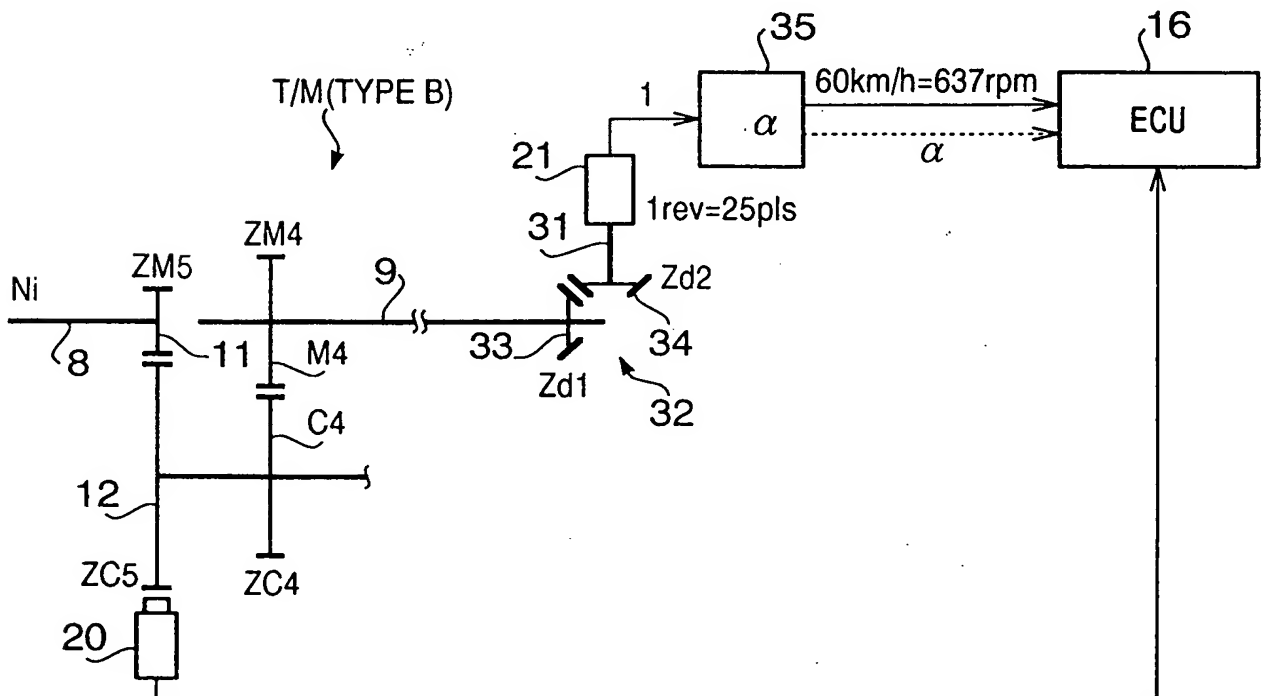




FIG.13a

| GEAR STAGE | GEAR RATIO (REDUCTION GEAR RATIO)GR | (Nd) |
|---------------|--|------|
| Rev | 5.068 | 69.0 |
| 1st | 5.315 | 69.0 |
| 2nd | 2.908 | 69.0 |
| 3rd | 1.558 | 69.0 |
| 4th | 1.000 | 70.0 |
| 5th | 0.721 | 69.0 |

FIG.13b

| |
|-------|
| PTM |
| 354.0 |
| 372.0 |
| 203.0 |
| 109.0 |
| 70.0 |
| 50.0 |

FIG.14

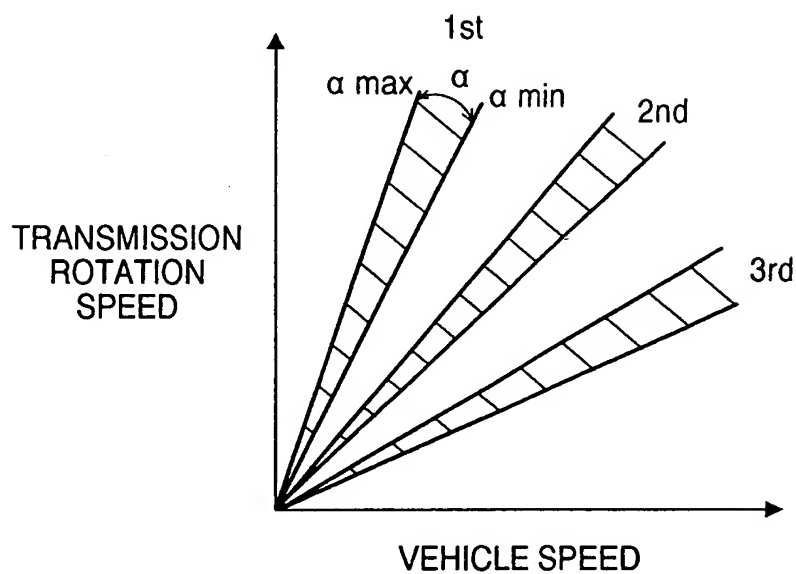


FIG.15

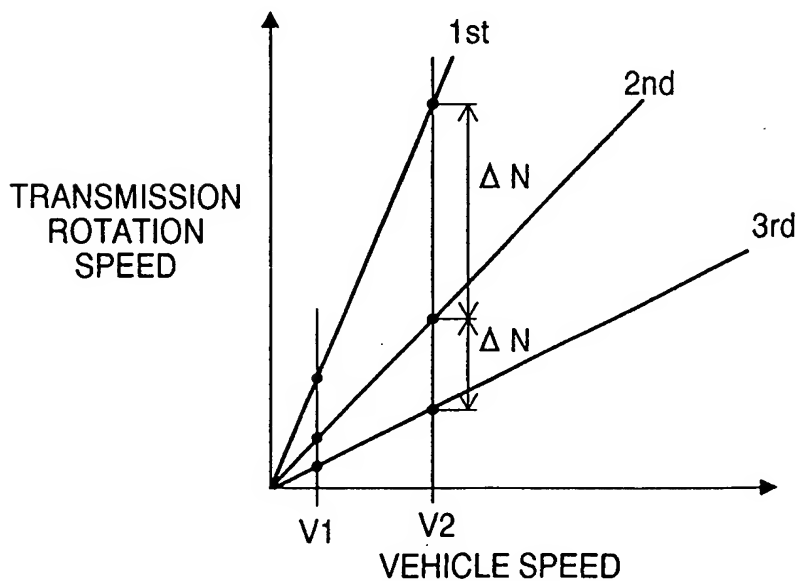




FIG.16

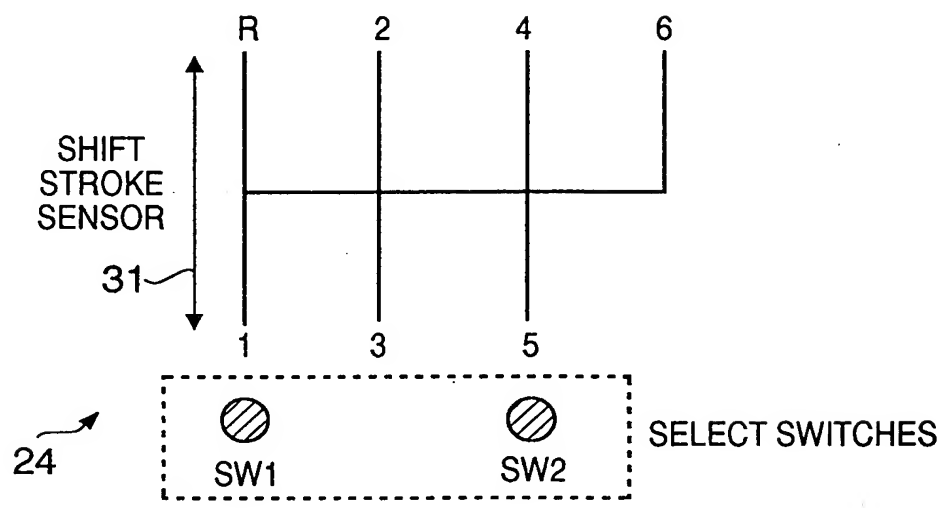




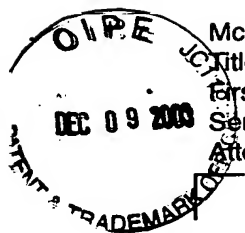
FIG.17

| | | NUMBER OF TEETH OF DRIVEN GEAR | | | | | | | | | | | |
|------------|----------------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|--|
| GEAR STAGE | REDUCTION GEAR RATIO | 10 | | 11 | | 12 | | 13 | | ... | 17 | | |
| | | PTM | Nd | PTM | Nd | PTM | Nd | PTM | Nd | | PTM | Nd | |
| Rev | 5.701 | 394.0 | 69.0 | 434.0 | 76.0 | 474.0 | 83.0 | 514.0 | 90.0 | ... | 668.0 | 117.0 | |
| 1st | 5.979 | 413.0 | 69.0 | 455.0 | 76.0 | 497.0 | 83.0 | 539.0 | 90.0 | ... | 706.0 | 118.0 | |
| 2nd | 3.434 | 237.0 | 69.0 | 261.0 | 76.0 | 286.0 | 83.0 | 310.0 | 90.0 | ... | 406.0 | 118.0 | |
| 3rd | 1.862 | 129.0 | 69.0 | 142.0 | 76.0 | 155.0 | 83.0 | 168.0 | 90.0 | ... | 220.0 | 118.0 | |
| 4th | 1.297 | 90.0 | 69.0 | 99.0 | 76.0 | 108.0 | 83.0 | 117.0 | 90.0 | ... | 154.0 | 118.0 | |
| 5th | 1.000 | 70.0 | 70.0 | 76.0 | 76.0 | 84.0 | 84.0 | 90.0 | 90.0 | ... | 118.0 | 118.0 | |
| 6th | 0.774 | 54.0 | 69.0 | 59.0 | 76.0 | 65.0 | 83.0 | 70.0 | 90.0 | ... | 92.0 | 118.0 | |
| FAIL | Rev | 394.0 | 114.0 | 434.0 | 126.0 | 474.0 | 138.0 | 514.0 | 149.0 | ... | 668.0 | 194.0 | |
| | 1ST | 413.0 | 221.0 | 455.0 | 244.0 | 497.0 | 266.0 | 539.0 | 289.0 | ... | 706.0 | 379.0 | |
| | 4TH | 90.0 | 26.0 | 99.0 | 28.0 | 108.0 | 31.0 | 117.0 | 34.0 | ... | 154.0 | 44.0 | |
| | 5TH | 70.0 | 37.0 | 76.0 | 40.0 | 84.0 | 45.0 | 90.0 | 48.0 | ... | 118.0 | 63.0 | |
| | 6TH | 54.0 | 15.0 | 59.0 | 17.0 | 65.0 | 18.0 | 70.0 | 20.0 | ... | 92.0 | 26.0 | |



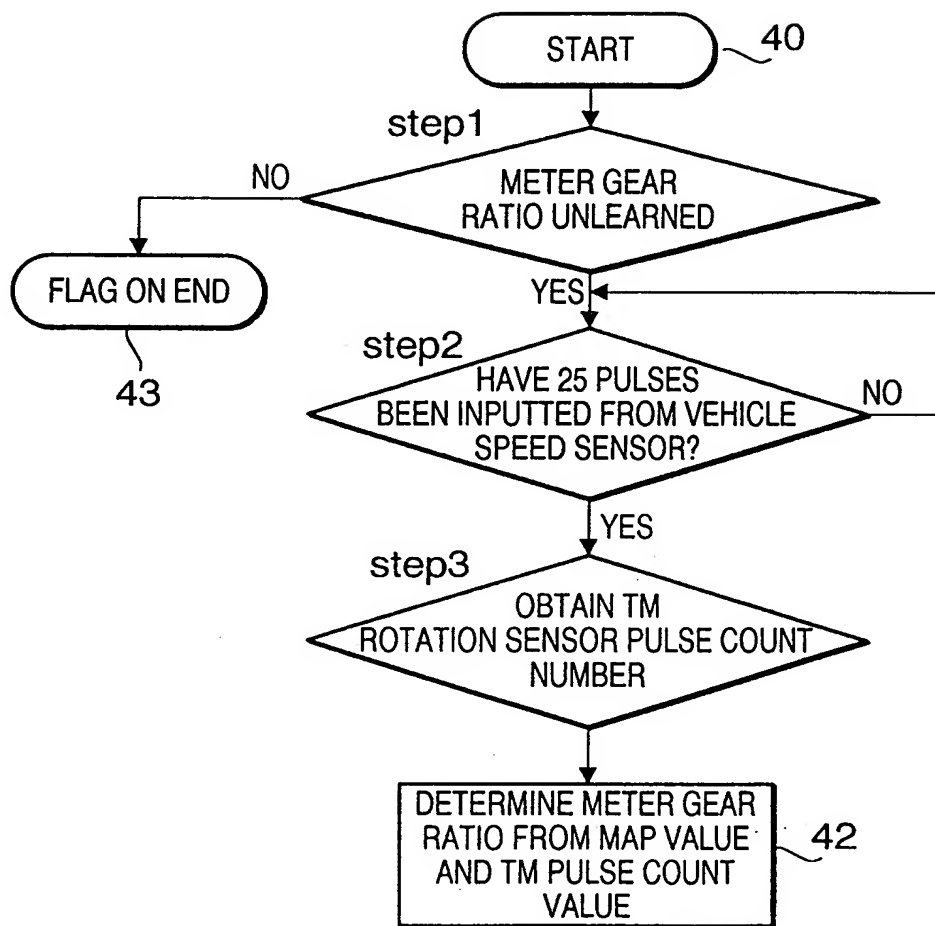
FIG.18

| NUMBER OF TEETH OF DRIVEN GEAR | | | | | | | | | | | | | | |
|--------------------------------|----------------------|-------|-------|--|-------|-------|--|-------|-------|--|-------|-------|--|-------|
| GEAR STAGE | REDUCTION GEAR RATIO | 10 | | | 11 | | | 12 | | | 13 | | | 17 |
| | | PTM | Nd | | PTM | Nd | | PTM | Nd | | PTM | Nd | | |
| Rev | 5.068 | 354.0 | 69.0 | | 390.0 | 76.0 | | 425.0 | 83.0 | | 461.0 | 90.0 | | 117.0 |
| 1st | 5.315 | 372.0 | 69.0 | | 409.0 | 76.0 | | 446.0 | 83.0 | | 483.0 | 90.0 | | 118.0 |
| 2nd | 2.908 | 203.0 | 69.0 | | 223.0 | 76.0 | | 244.0 | 83.0 | | 264.0 | 90.0 | | 118.0 |
| 3rd | 1.558 | 109.0 | 69.0 | | 119.0 | 76.0 | | 130.0 | 83.0 | | 141.0 | 90.0 | | 118.0 |
| 4th | 1.000 | 70.0 | 70.0 | | 77.0 | 77.0 | | 84.0 | 84.0 | | 91.0 | 91.0 | | 118.0 |
| 5th | 0.721 | 50.0 | 69.0 | | 76.0 | 76.0 | | 60.0 | 83.0 | | 65.0 | 90.0 | | 118.0 |
| 6th | | | | | | | | | | | | | | |
| FAIL | Rev | 354.0 | 121.0 | | 390.0 | 134.0 | | 425.0 | 146.0 | | 461.0 | 158.0 | | 207.0 |
| | 1ST | 372.0 | 238.0 | | 409.0 | 255.0 | | 446.0 | 255.0 | | 483.0 | 255.0 | | 255.0 |
| | 4TH | 70.0 | 24.0 | | 77.0 | 26.0 | | 84.0 | 28.0 | | 91.0 | 31.0 | | 40.0 |
| | 5TH | 50.0 | 32.0 | | 55.0 | 35.0 | | 60.0 | 38.0 | | 65.0 | 41.0 | | 54.0 |



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FIG.19





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FIG.20

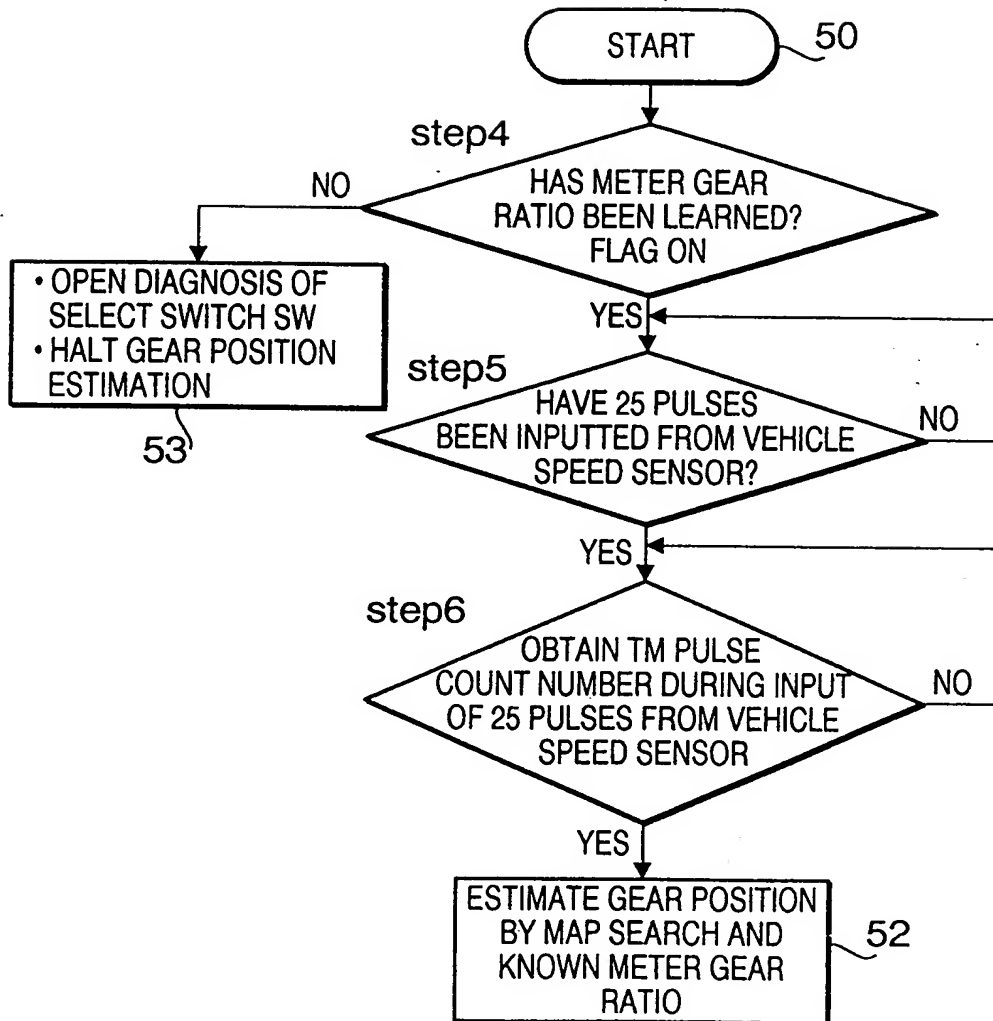




FIG.21

| Z TM TYPE | Dri(5th) | | 4th | | 3rd | | 2nd | | 1st | | Rev | | 6th | |
|--------------|----------|-----|-----|-----|------|------|-----|-----|-----|-----|-----|-----|------|------|
| | M | C | M | C | M | C | M | C | M | C | M | C | M | C |
| C TYPE | ZM5 | ZC5 | ZM4 | ZC4 | ZM3 | ZMC | ZM2 | ZC2 | ZM1 | ZC1 | ZMR | ZCR | ZM6 | ZC6 |
| D TYPE | ZM5 | ZC5 | ZM4 | ZC4 | ZM3' | ZC3' | ZM2 | ZC2 | ZM1 | ZC1 | ZMR | ZC5 | ZM6' | ZC6' |

FIG.22

